

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Sara Lavi

Serial No.: 09/029,479

Group Art Unit: 1632

Filed: 10/21/98

Examiner: Woitach, J

For: MANIPULATION AND DETECTION OF PROTEIN PHOSPHATEASE 2C-PP2CALPHA - EXPRESSION IN TUMOR CELLS FOR CANCER THERAPY, PREVENTION AND DETECTION

**Box Sequence**

**Assistant Commissioner for Patents**  
**Washington, DC 20231**

**SUBMISSION OF SEQUENCE LISTING/STATEMENT**

1. This replies to the communication from the Examiner in charge of this application, Paper No. 7, dated December 2, 1999.

X  A copy of the communication is enclosed.

2. I, Amy E. Rinaldo, state the following:

3. Submitted herewith is/are:

X  A. Sequence Listing(s) for the nucleotide and/or amino acid sequence(s).

Each sequence Listing is assigned a separate identifier.

X  B. A copy of each Sequence Listing submitted for this application in computer readable form.

     C. Preliminary Amendment inserting the Sequence Listing into the application.

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**CERTIFICATE OF MAILING UNDER 37 CFR 1.8(a) and 1.10**

I hereby certify that on the date shown below this correspondence is being deposited with the United States Postal Service in an envelope addressed to: Box Sequence List, Assistant Commissioner for Patents, Washington, DC 20231

**37 CFR 1.8(a)**

X  sufficient postage as first class mail.

**37 CFR 1.10\***

     as "Express Mail Post Office to Addressee"  
Mailing Label No.     

  
Marie M. DeWitt

DATED: February 9, 2000

U.S.S.N. 09/029,479

**STATEMENT THAT SEQUENCE LISTING  
AND COMPUTER READABLE COPY ARE THE SAME**

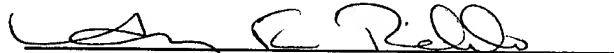
I hereby state that each computer readable form submitted in this application is the same as the Sequence Listing to which it is indicated to relate.

I hereby state that all papers accompanying this submission, or for which a request for transfer from Applicants' other application, introduce no new matter.

The Commissioner is authorized to charge any fee or credit any overpayment in connection with this communication to our Deposit Account No. 11-1449.

Respectfully submitted,

KOHN & ASSOCIATES



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Phone (248) 539-5050  
Fax (248) 539-5055

Date: February 9, 2000

J. Waitach

1632

#8  
84  
4.6.10

PAGE: 1

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/029,479

DATE: 03/11/2000  
TIME: 03:35:52

INPUT SET: S35010.raw

This Raw Listing contains the General  
Information Section and up to the first 5 pages.

SEQUENCE LISTING

ENTERED

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(1) General Information:

(i) APPLICANT: Lavi, Sara

(ii) TITLE OF INVENTION: MANIPULATION AND DETECTION OF PROTEIN  
PHOSPHATASE 2C -PP2CALPHA- EXPRESSION IN TUMOR CELLS FOR  
CANCER THERAPY, PREVENTION AND DETECTION

(iii) NUMBER OF SEQUENCES: 20

(iv) CORRESPONDENCE ADDRESS:

- (A) ADDRESSEE: Kohn & Associates
- (B) STREET: 30500 Northwestern Hwy.
- (C) CITY: Farmington Hills
- (D) STATE: Michigan
- (E) COUNTRY: US
- (F) ZIP: 48334

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Floppy disk
- (B) COMPUTER: IBM PC compatible
- (C) OPERATING SYSTEM: PC-DOS/MS-DOS
- (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

(vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER:
- (B) FILING DATE:
- (C) CLASSIFICATION:

(viii) ATTORNEY/AGENT INFORMATION:

- (A) NAME: Kohn, Kenneth I.
- (B) REGISTRATION NUMBER: 30,955
- (C) REFERENCE/DOCKET NUMBER: 2290.00037

(ix) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: (810) 539-5050
- (B) TELEFAX: (810) 539-5055

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 amino acids
- (B) TYPE: amino acid

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MAR 27 2001  
TC 1000 MAIL ROOM

**INPUT SET: S35010.raw**

(ii) MOLECULE TYPE: peptide

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55      (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

```

57 Asn Asp Asp Thr Asp Ser Ala Ser Thr Asp  
58 1 5 10

60 (2) INFORMATION FOR SEQ ID NO:2:

62 (i) SEQUENCE CHARACTERISTICS:  
63 (A) LENGTH: 15 amino acids  
64 (B) TYPE: amino acid  
65 (C) STRANDEDNESS: single  
66 (D) TOPOLOGY: linear

```

68      (ii) MOLECULE TYPE: peptide

```

73 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

|    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 75 | Tyr | Lys | Asn | Asp | Asp | Thr | Asp | Ser | Thr | Ser | Thr | Asp | Asp | Met | Trp |
| 76 | 1   |     |     |     | 5   |     |     |     |     | 10  |     |     |     |     | 15  |

78 (2) INFORMATION FOR SEQ ID NO:3:

```

80      (i) SEQUENCE CHARACTERISTICS:
81          (A) LENGTH: 9 amino acids
82          (B) TYPE: amino acid
83          (C) STRANDEDNESS: single
84          (D) TOPOLOGY: linear

```

86 (ii) MOLECULE TYPE: peptide

91 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

93 Pro Asn Lys Asp Asn Asp Gly Gly Ala  
94 1 5

96 (2) INFORMATION FOR SEQ ID NO:4:

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98      (i) SEQUENCE CHARACTERISTICS:
99          (A) LENGTH: 20 base pairs

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/029,479DATE: 03/11/2000  
TIME: 03:35:52

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100 (B) TYPE: nucleic acid  
101 (C) STRANDEDNESS: single  
102 (D) TOPOLOGY: linear  
103  
104 (ii) MOLECULE TYPE: other nucleic acid  
105 (A) DESCRIPTION: /desc = "Primer"  
106  
107  
108  
109

110 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:  
111

112 AGGATCAAGT CATAATGGGA

20

113  
114 (2) INFORMATION FOR SEQ ID NO:5:  
115

116 (i) SEQUENCE CHARACTERISTICS:

117 (A) LENGTH: 20 base pairs  
118 (B) TYPE: nucleic acid  
119 (C) STRANDEDNESS: single  
120 (D) TOPOLOGY: linear  
121

122 (ii) MOLECULE TYPE: other nucleic acid  
123 (A) DESCRIPTION: /desc = "Primer"  
124

125 (iv) ANTI-SENSE: YES  
126  
127  
128  
129

130 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:  
131

132 GCTGGAGTCT GATTTACAAC

20

133  
134 (2) INFORMATION FOR SEQ ID NO:6:  
135

136 (i) SEQUENCE CHARACTERISTICS:

137 (A) LENGTH: 18 base pairs  
138 (B) TYPE: nucleic acid  
139 (C) STRANDEDNESS: single  
140 (D) TOPOLOGY: linear  
141

142 (ii) MOLECULE TYPE: other nucleic acid  
143 (A) DESCRIPTION: /desc = "Primer"  
144  
145  
146  
147

148 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:  
149

150 GAAGTAGTCG ACACCTGT

18

151  
152 (2) INFORMATION FOR SEQ ID NO:7:

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/029,479DATE: 03/11/2000  
TIME: 03:35:53

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153  
154 (i) SEQUENCE CHARACTERISTICS:  
155 (A) LENGTH: 21 base pairs  
156 (B) TYPE: nucleic acid  
157 (C) STRANDEDNESS: single  
158 (D) TOPOLOGY: linear  
159

160 (ii) MOLECULE TYPE: other nucleic acid  
161 (A) DESCRIPTION: /desc = "Primer"  
162  
163  
164  
165

166 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

167  
168 GTTTGAGACC TTCAACACCC C

21

169  
170 (2) INFORMATION FOR SEQ ID NO:8:

171  
172 (i) SEQUENCE CHARACTERISTICS:  
173 (A) LENGTH: 23 base pairs  
174 (B) TYPE: nucleic acid  
175 (C) STRANDEDNESS: single  
176 (D) TOPOLOGY: linear  
177

178 (ii) MOLECULE TYPE: other nucleic acid  
179 (A) DESCRIPTION: /desc = "Primer"  
180  
181  
182  
183

184 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

185  
186 GTGGCCATCT CTTGCTCGAA GTC

23

187  
188 (2) INFORMATION FOR SEQ ID NO:9:

189  
190 (i) SEQUENCE CHARACTERISTICS:  
191 (A) LENGTH: 6 amino acids  
192 (B) TYPE: amino acid  
193 (C) STRANDEDNESS: single  
194 (D) TOPOLOGY: linear  
195

196 (ii) MOLECULE TYPE: peptide  
197  
198  
199  
200

201 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

202  
203 Met Gly Ala Phe Leu Asp

204 1 5  
205

RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/029,479DATE: 03/11/2000  
TIME: 03:35:53

INPUT SET: S35010.raw

206 (2) INFORMATION FOR SEQ ID NO:10:

207

208 (i) SEQUENCE CHARACTERISTICS:

209 (A) LENGTH: 28 base pairs

210 (B) TYPE: nucleic acid

211 (C) STRANDEDNESS: single

212 (D) TOPOLOGY: linear

213

214 (ii) MOLECULE TYPE: other nucleic acid

215 (A) DESCRIPTION: /desc = "Primer"

216

217

218

219

220 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

221

222 CGGGATCCGC ATGGGAGCAT TTTTAGAC

28

223

224 (2) INFORMATION FOR SEQ ID NO:11:

225

226 (i) SEQUENCE CHARACTERISTICS:

227 (A) LENGTH: 5 amino acids

228 (B) TYPE: amino acid

229 (C) STRANDEDNESS: single

230 (D) TOPOLOGY: linear

231

232 (ii) MOLECULE TYPE: peptide

233

234

235

236

237 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

238

239 Thr Asp Asp Met Trp

240 1 5

241

242 (2) INFORMATION FOR SEQ ID NO:12:

243

244 (i) SEQUENCE CHARACTERISTICS:

245 (A) LENGTH: 27 base pairs

246 (B) TYPE: nucleic acid

247 (C) STRANDEDNESS: single

248 (D) TOPOLOGY: linear

249

250 (ii) MOLECULE TYPE: other nucleic acid

251 (A) DESCRIPTION: /desc = "Primer"

252

253

254

255

256 (xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

257

258 CGCGGATCCT TACCACATAT CATCAGT

27

PAGE: 1

**SEQUENCE VERIFICATION REPORT**  
**PATENT APPLICATION US/09/029,479**

DATE: 03/11/2000  
TIME: 03:35:53

*INPUT SET: S35010.raw*

Line

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Original Text